

REMARKS

Claims 19-21, 23-26 and 28-32 are allowed. Claims 2, 4, 11 and 13 are canceled. Claim 22 was previously canceled. Thus, Claims 1, 3, 5-10, 12, 14-21, 23-26 and 28-32 are pending. All issues raised in the Office Action mailed February 17, 2010 are addressed hereinafter.

I. CLAIMS 18, 28 AND 32 -- 35 U.S.C. § 101

Claims 18, 28 and 32 were rejected under 35 U.S.C. § 101 as allegedly directed to non-statutory subject matter. (Office Action: page 2)

The applicants believe that the rejection is fully overcome in amended Claims 18, 28 and 32, which recite “a computer-readable non-transitory medium.” The applicants understand that the Office has examined the case under 35 U.S.C. § 112 and determined that the amendment does not constitute new matter. Reconsideration and withdrawal of the rejection is respectfully requested.

II. ISSUES RELATING TO ALLEGED PRIOR ART

A. CLAIMS 1, 6-10 AND 15-18 -- 35 U.S.C. § 103

Claims 1, 6-10, and 15-18 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Zheng, U.S. Patent Publication No. 2004/0001508 (“Zheng”) in view of Rekhter, U.S. Patent Publication No. 2009/0080431 (“Rekhter”). (Office Action: page 4) This rejection is respectfully traversed.

CLAIM 1

Among other features, Claim 1 recites:

**receiving a notification that a tunnel ending at the tunnel end point has been constructed around a component in the data communications network;
upon receiving the notification, recording a neighbor node comprising the tunnel end point and permission to remove headers for tunneled packets to the neighbor node;**

Support for the amendment is provided at least in paragraphs [31]-[39] of the applicants' specification.

It is well founded that to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the references cited and relied upon must teach or suggest all the claim limitations. In addition, a sufficient factual basis to support the obviousness rejection must be proffered. *In re Freed*, 165 USPQ 570 (CCPA 1970); *In re Warner*, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 148 USPQ 721 (CCPA 1966).

Claim 1 is patentable over Zheng and Rekhter because Claim 1 recites one or more features that are not disclosed in Zheng and Rekhter, individually or in combination. For example, Zheng and Rekhter fail to disclose receiving a notification about constructing a tunnel around a component, recording a neighbor node comprising a tunnel end point, and recording permission to remove headers for tunneled packets to the neighbor node, as recited in Claim 1.

In Zheng, a tunnel starting point encapsulates a received data packet and adds an outer header to a stack of headers in the packet. The outer header identifies a source node and a destination node of the tunnel. (Zheng: Para [76], ll. 11-16) In Zheng, information about the tunnel end points is carried in the outer header of each individual packets. (Zheng: Para [80]) However, Zheng does not send any **notification** that a tunnel has been constructed around a component in the network or any **notification** that the tunnel ends at a tunnel end point, as recited in Claim 1.

Moreover, Zheng does not describe that upon receiving the notification, a neighbor node comprising the tunnel end point is recorded at a forwarding node, as recited in Claim 1. Further, in Zheng, no permission to remove headers for the tunneled packet destined to the end points is recorded at the forwarding node, as claimed.

Rekhter describes penultimate label popping, in which a router that is adjacent to an egress router removes a tunnel label from a label stack carried in a packet. (Rekhter: Para [48]) Rekhter describes that an LSP tunnel can be established via BGP, LDP or RSVP, between an ingress router and an egress router. (Rekhter: Para [48]) However, Rekhter does not construct a tunnel around a component in a network, as claimed. Thus, Rekhter does not send and does not receive a notification about the tunnel constructed around the component, as claimed.

Moreover, Rekhter does not describe that, upon receiving the notification, permission to remove headers for tunneled packets to a neighbor node is recorded at a forwarding node, as claimed. Rekhter stores information about the tunnel ingress and egress routers (Rekhter: FIG. 4, element 470) and tunnel forwarding information (Rekhter: FIG. 4, element 465), but does **not store permissions** to remove headers for tunneled packets destined to the neighbor nodes that comprise the tunnel end points, as claimed. In fact, Rekhter does not describe that permission to remove headers for tunneled packets to the neighbor nodes is ever granted, much less that it is recorded, as claimed. Rekhter does not describe any data structures for storing permissions to remove headers for tunneled packets to the neighbor node, as recited in Claim 1.

Even in combination, Zheng and Rekhter fail to disclose the claimed approach. Because neither reference describes the step of receiving a notification and the step of recording, as recited in Claim 1, a combination of the references would not have described or suggested those steps. Therefore, Claim 1 recites one or more features that are not described or suggested by Zheng and Rekhter, individually or in combination. Thus, Claim 1 is patentable over Zheng and Rekhter. Reconsideration and withdrawal of the rejection is respectfully requested.

CLAIMS 9-10 AND 18

Each of Claims 9-10 and 18 recites features similar to those in Claim 1. Therefore, applicants believe that each of Claims 9-10 and 18 is patentable over Zheng and Rekhter for the same reasons discussed for Claim 1. Reconsideration and withdrawal of the rejection is respectfully requested.

B. CLAIMS 2-4 AND 11-13 -- 35 U.S.C. § 103

Claims 2-4 and 11-13 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Zheng in view of Rekhter, and further in view of Kompella, U.S. Patent Publication 2008/0192762 ("Kompella"). (Office Action: page 6) This rejection is respectfully traversed.

Claims 2-4 depend from Claim 1, and Claims 11-13 depend from Claim 9. As discussed above, Zheng and Rekhter fail to describe or suggest at least one feature recited in each of Claims

1 and 9. Further, Kompella does not cure the deficiencies of Zheng and Rekhter with respect to Claims 1 and 9. Therefore, Kompella, Zheng and Rekhter, individually or in combination, fail to disclose the whole subject matter of Claims 1 and 9. Further, and due to claim dependency, Kompella, Zheng and Rekhter, individually or in combination, fail to disclose the whole subject matter of Claims 2-4 and 11-13. Reconsideration and withdrawal of the rejection is respectfully requested.

C. DEPENDENT CLAIMS

The claims that are not discussed above depend directly or indirectly on the claims that have been discussed. Therefore, those claims are patentable for the reasons given above. In addition, each of the dependent claims separately introduces features that independently render the claim patentable. However, due to the fundamental differences already identified, and to expedite positive resolution of the examination, separate arguments are not provided for each of the dependent claims at this time.

III. CONCLUSION

All of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If any applicable fee is missing or insufficient, the Commissioner is authorized throughout the pendency of this application to charge any applicable fee to our Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Date: May 11, 2010

/MalgorzataAKulczycka#50496/

Malgorzata A. Kulczycka

Reg. No. 50,496

2055 Gateway Place, Suite 550
San Jose, California 95110
Telephone: (408) 414-1228
Facsimile: (408) 414-1076